Microminiature Connectors

Filter-TMDM



With an increasing number of MDM connectors being used in avionics and military equipment and with increasing emphasis being put on EMI, RFI and EMP shielding, Cannon have developed a range of filter connectors to suit most applications.

The TMDM receptacle accommodates from 8 to 37 sizes, 24 AWG socket contacts on 1,27 (.050) centres and mates with the standard MDM plugs.

Features

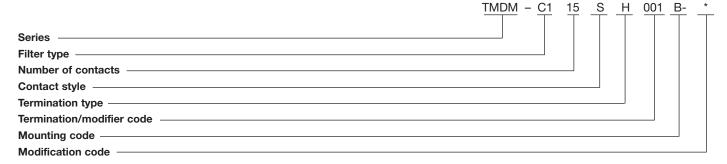
- Transverse monolith filter for EMI and RFI shielding.
- Rugged aluminum one piece shell.
- Silicone interfacial environmental seal.
- Glass filled diallyl phthalate insulator.
- A variety of filter types for each pin.

Specifications

Standard materials & finishes

Aluminum alloy per QQ-A-200/8 with electroless nickel finish per QQ-N-290 Insulator Glass filled diallyl phthalate per MIL-M-14. Type SDGF Contact, socket Copper alloy, 50 microinch gold per MIL-G-45204, Type II, Class I Interfacial seal Silicone base rubber ELECTRICAL DATA No. of contacts 9 to 37 Dielectric withstanding voltage 300 VAC Insulation resistance 5000 Mohm at 100 VDC Voltage rating (working) 100 VDC Current rating 3 amps max. 250, 500, 1000, 2000 picofarads Maximum capacitance Filter type MECHANICAL FEATURES Size or length Friction/jackscrews Coupling Polarization Keystone shaped shell Contact spacing .050 (1,27) centers Shell style Single piece receptacle

How to Order



Series:

Filter TMDM - Micro "D" - Metal housing

Filter type:

"C" capacitor type

C1 150 - 250 pF capacitance

300 - 500 pF capacitance C2

C3 700 - 1000 pF capacitance

1300 - 2000 pF capacitance

Number of contacts:

9, 15, 21, 25, 31, 37 only

Contact style:

S - socket (receptacle)

P - Pin (plug)

Dimensions shown in inch (mm) Specifications and dimensions subject to change

Termination type:

H - harness, insulated solid or stranded wire

L - lead, solid uninsulated wire

Termination:

Consult standard wire termination code for lead material and lead length

Mounting code:

A - Flange mounting, Ø.125 (3,18) mounting holes

B - Flange mounting, Ø.092 (2,34) mounting holes

L - Low profile (slotted head)

M2 - Allen head jackscrew assembly,

low profile

M3 - Allen head jackscrew assembly, high profile

M5 - Slot head jackscrew assembly, low profile

M6- Slot head jackscrew assembly, high profile

M7 - Jacknut assembly

P - Jackpost

Modification code:

Shell finish MOD. Codes. * To be assigned as required

* No number = Standard tin/lead finish



Guaranteed Minimum Attenuation

Filter	Capacitance	Minimum Insertion Loss-decibels								
designation	range (pF)	10 MHz	15 MHz	30 MHz	50 MHz	100 MHz	200 MHz	500 MHz	1 GHz	
C1	150 - 250				4	6	15	20	35	
C2	300 - 500			3	6	12	18	25	40	
C3	700 - 1000		3	7	13	17	25	38	48	
C4	1300 - 2000	5	8	13	18	23	30	40	50	

Standard Wire Termination Codes

Cannon Modification Codes - (Not Mil Spec)

The following termination codes are listed for your information. For additional codes please refer to Appendix on page 79 and 81. **All wire lengths are minimum.**

Harness Type (H) #26 AWG per

MIL-W-16878/4 Type E Teflon, stranded

Lengt	h	All Yellow	Color Coded		
3	(76.2)	H020	H027		
6	(152.4)	H019	H016		
8	(203.2)	H026	H034		
10	(254.0)	H029	H025		
12	(304.8)	H028	H002		
18	(457.2)	H001	H003		
20	(508.0)	H038	H023		
24	(509.6)	H009	H004		
30	(762.0)	H010	H005		
36	(914.4)	H011	H006		
48	(1219.2)	H013	H048		
72	(1828.8)	H017	H046		
120	(3048.0)	H042	H041		

Solid Uninsulated Type (L) #25 AWG gold plated copper.

L7 L6

L6 L10

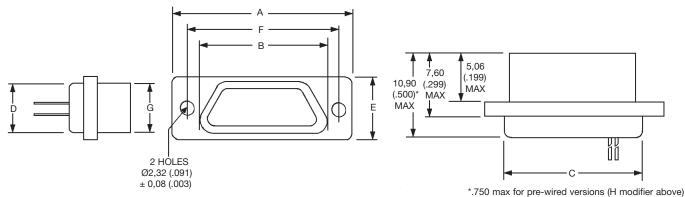
Code Length L61 .125 (.18)L56 (3.81)L57 .190 (4.83)L39 .250 (5.35) L58 .375 (9.52) L1 .500 (12.70) .750 (19.05) L14 L2 1.000 (25.40)

1.500 (38.10)

2.000 (50.80) 2.500 (63.50)

3.000 (76.20)

Shell Dimensions



A max	B max	C max	D max	E max	F max ±0,13 (.005)	G max
.785 (19,94)	.400 (10,16)	.400 (10,16)	.270 (6,86)	.308 (7,83)	.565 (14,36)	.251 (6,38)
.935 (23,75)	.550 (13,97)	.550 (13,97)	.270 (6,86)	.308 (7,83)	.715 (18,17)	.251 (6,38)
1.085 (27,60)	.700 (17,78)	.700 (17,78)	.270 (6,86)	.308 (7,83)	.865 (21,98)	.251 (6,38)
1.185 (30,10)	.800 (20,32)	.800 (20,32)	.270 (6,86)	.308 (7,83)	.965 (24,52)	.251 (6,38)
1.335 (33,90)	.950 (24,13)	.950 (24,13)	.270 (6,86)	.308 (7,83)	1.115 (28,30)	.251 (6,38)
1.485 (37,70)	1.100 (28,00)	1.100 (28,00)	.270 (6,86)	.308 (7,83)	1.265 (32,20)	.251 (6,38)
	max .785 (19,94) .935 (23,75) 1.085 (27,60) 1.185 (30,10) 1.335 (33,90)	max max .785 (19,94) .400 (10,16) .935 (23,75) .550 (13,97) 1.085 (27,60) .700 (17,78) 1.185 (30,10) .800 (20,32) 1.335 (33,90) .950 (24,13)	max max max .785 (19,94) .400 (10,16) .400 (10,16) .935 (23,75) .550 (13,97) .550 (13,97) 1.085 (27,60) .700 (17,78) .700 (17,78) 1.185 (30,10) .800 (20,32) .800 (20,32) 1.335 (33,90) .950 (24,13) .950 (24,13)	max max max max .785 (19,94) .400 (10,16) .400 (10,16) .270 (6,86) .935 (23,75) .550 (13,97) .550 (13,97) .270 (6,86) 1.085 (27,60) .700 (17,78) .700 (17,78) .270 (6,86) 1.185 (30,10) .800 (20,32) .800 (20,32) .270 (6,86) 1.335 (33,90) .950 (24,13) .950 (24,13) .270 (6,86)	max max max max max .785 (19,94) .400 (10,16) .400 (10,16) .270 (6,86) .308 (7,83) .935 (23,75) .550 (13,97) .550 (13,97) .270 (6,86) .308 (7,83) 1.085 (27,60) .700 (17,78) .700 (17,78) .270 (6,86) .308 (7,83) 1.185 (30,10) .800 (20,32) .800 (20,32) .270 (6,86) .308 (7,83) 1.335 (33,90) .950 (24,13) .950 (24,13) .270 (6,86) .308 (7,83)	max max max max max ±0,13 (.005) .785 (19,94) .400 (10,16) .400 (10,16) .270 (6,86) .308 (7,83) .565 (14,36) .935 (23,75) .550 (13,97) .550 (13,97) .270 (6,86) .308 (7,83) .715 (18,17) 1.085 (27,60) .700 (17,78) .700 (17,78) .270 (6,86) .308 (7,83) .865 (21,98) 1.185 (30,10) .800 (20,32) .800 (20,32) .270 (6,86) .308 (7,83) .965 (24,52) 1.335 (33,90) .950 (24,13) .950 (24,13) .270 (6,86) .308 (7,83) 1.115 (28,30)



Dimensions shown in inch (mm) Specifications and dimensions subject to change

Typical Filter Performance

